IN THE CLAIMS:

1. (Currently Amended) A variable bitrate video encoding method comprising, for encoding a sequence of frames, at least a quantization step of an input bitstream, a coding step of said quantized bitstream, and a control step of the quantization step with respect to a buffer occupancy at the output of said coding step, said method being characterized in that it also comprises an analysis step, for defining ~~on the basis of parameters related to said input bitstream~~ a reserve of bits (ROBC) ~~periodically updated at~~ indicating a number of bits used for coding each frame is either greater or less than a predetermined number, and an additional control step, for maintaining, increasing or decreasing the quantization step value according to the state of said reserve of bits.

2. (Original) An encoding method according to claim 1, characterized in that the quantization stepvalue is modified only if said reserve of bits reaches critical values.

3. (Currently Amended) An encoding method comprising, for encoding a sequence of frames, at least a quantization step of an input bitstream, a coding step of said quantized bitstream, and a control step of the quantization step with respect to a buffer occupancy at the output of said coding step, said method

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being characterized in that it also comprises an analysis step, for defining on the basis of parameters related to said input bitstream a reserve of bits (ROBC) periodically updated at each frame, and an additional control step, for maintaining, increasing or decreasing the quantization step value according to the state of said reserve of bits~~according to claim 2,~~

wherein~~characterized in that the~~ evolution of ~~the~~an initial quantization step Q_INIT with respect to the state of the reserve (ROBC) is given by the following relations :

If (ROBC < 0) and (S1 < -ROBC/TFBB < S2)
then Q = Q_INIT + V1
If (ROBC < 0) and (S2 < -ROBC/TFBB < S3)
then Q = Q_INIT + V2
If (ROBC < 0) and (S3 < -ROBC/TFBB < S4)
then Q = Q_INIT + V3
If (ROBC < 0) and (S4 < -ROBC/TFBB < S5)
then Q = Q_INIT + V4
If (ROBC < 0) and (S5 < -ROBC/TFBB < S6)
then Q = Q_INIT + V5
If (ROBC < 0) and (S6 < -ROBC/TFBB < S7)
then Q = Q_INIT + V6
If (ROBC < 0) and (S7 < -ROBC/TFBB)
then Q = Q_INIT + V7
If (ROBC > 0) and (T1 < ROBC/TFBB)
then Q = Q_INIT - V8
Else ROBC = Q_INIT

where S1 to S7 are thresholds of increasing value, T1 is also a threshold, and V1 to V8 are the variations of said initial quantization step.

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4. (Original) An encoding method according to claim 3, characterized in that said thresholds S1 to S7 are equal to (0,07 ; 0,15 ; 0,27 ; 0,4 ; 0,5 ; 0,6 ; 0,7) respectively, T1 is equal to (0,1) and said variations V1 to V8 are respectively equal to 2, 4, 6, 8, 10, 12, 14 and 1.

5. (Original) An encoding device allowing to implement an encoding method according to anyone of claims 1 to 4.

6. (New) An encoding method according to claim 1, wherein the predetermine number is an average number of bits to code each frame of the sequence.

7. (New) An encoding method according to claim 1, wherein the analysis step includes finding a total bit budget for the sequence of frames and calculating the reserve of bits (ROBC) based on the total bit budget.

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